

ABSTRACT

A stepping motor, head, or other drive mechanism is driven with high precision without using a high speed CPU or dedicated hardware. Timing data controlling the timing at which drive mechanism operation changes, and plural control data controlling drive mechanism operation at each timing change, are stored to memory. After a drive command from the CPU is received, timing data is read from memory by a direct memory access (DMA), and sent to a timer. Based on a time-up signal from the timer, the drive control data is read sequentially from memory by DMA for each of plural control data types and sent to a drive control unit. Afterward, the next timing data is sent to the timer and the operation repeated. The drive control unit drives the drive mechanism based on the control data.

Patent Pending